

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. : 10/538,914 Confirmation No. 5661

Applicant : Ulrich Schoor

Filed : June 13, 2005

TC/A.U. : 2834

Examiner : D. J. Rosenau

Docket No. : R.304044

Customer No. : 02119

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

The prior art listed on the attached form PTO/SB/08a is prior art which was cited in paragraph 6 of the specification.

DE 199 28 190 discloses a piezoelectric actuator, e.g. for activating a mechanical component. The inventive piezoelectric actuator has a multilayered structure of piezoelectric layers with inner electrodes (2, 3) situated in between. A first outer electrode (6) is applied to a lateral surface and provides a conductive surface, said lateral surface being connected to the respective inner electrodes (2, 3). A second mesh- or woven-type outer electrode (7) is located on the first (6). A passive area (10) without an inner electrode layer is provided in the areas of the piezoelectric layers, which each have an inner electrode (2, 3) that is connected to the opposite side, respectively. The ceramic piezoelectric material, at least in the passive area (10), and the material of the two outer electrodes (7) have an almost identical temperature expansion coefficient, which reduces the effects of mechanical tensions in the piezoelectric actuator. The second outer electrode (7) preferably consists of a nickel-iron alloy such as invar and the piezoeramic consists of lead zirconate titanate.

Serial No. 10/538,914

DE 42 01 937 and DE 101 63 005 were cited as part on the original IDS of June 13, 2005 and were part of the PCT search report which includes a statement of their relevance, and thus an additional statement is not needed at this time.

Date: July 21, 2006

Royald E. Greige Registration No. 31,517 Attorney for Applicant Customer No. 02119

Respectfully submitted,

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Enclosure: form PTO/SB/08a J:\Bosch\R304044\06-07-21, R304044, IDS.wpd

PTO/SB/08a (08-03)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Application Number	10/538,914	1111
Filing Date	June 13, 2005	13 OC. 7
First Named Inventor	Ulrich SCHOOR	193
Art Unit	2834	MAR
Examiner Name	D. J. Rosenau	

Attorney Docket Number | R.304044

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Examiner Initials*	Cite No. ¹	Number	Kind Code	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Relevant Passages or Relevant Figures Appear	
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FOREIGN PATENT DOCUMENTS								
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		DE	199 28 190	A1	01-11-2001	Rudolf Heinz		
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